UNION CARBIDE

Nuclear Division News

Vol. 12, No. 3 • February 12, 1981

19 8609

WELDING TRAINING — Ted Adams, right, demonstrates welding techniques to B. Ralph Pearson and Elaine Hofstetter, as the consultant reports on aspects of the Training and Technology Project in Y-12.

19 8607

PHYSICAL TESTING STUDENTS — Phases of physical testing training are demonstrated, as Mike McAfee, ORAU; B. Ralph Pearson; students Gayle Treadway and Greg Brown; and Elaine Hofstetter, CSR, Inc. inspect equipment in the TAT building.

19 8608

MACHINING TECHNIQUES — Terry Kesterson, right, a student in TAT, demonstrates machining aspects of her training to Elaine Hofstetter, Mike McAfee and B. Ralph Pearson.

TAT project's success story subject of comprehensive study

The Training and Technology (TAT) Project, a 14-year-old training facility in the Y-12 Plant, was the recent subject of an intensive study by CSR, Incorporated, a consulting firm from Washington, commissioned by the Department of Labor to report on the success of the project and how it can be used as a pattern in other sections of the economy.

Elaine Hofstetter represented the firm in interviewing students, touring the facilities and studying statistics on the success of placing TAT graduates in industry all over the country. She also planned to pursue records of working graduates to see how well they fit into industrial patterns.

The TAT project has long been a source of pride in the Nuclear Division. The multifunded project is a joint effort of the Division, Oak Ridge Associated Universities and the Department of Energy. It has approximately 15 current sponsors and also has a program in which students may pay their own tuition if financially able.

Y-12's B. Ralph Pearson is the Nuclear Division's director of the program, and Bob Daniels supervisor of operations for ORAU. They showed Hofstetter the facilities and gave her access to various studies during her week-long stay in Y-12.

Currently, the program offers instruction in physical testing, welding, mechanical operations and drafting. Y-12 personnel are instructors in all five of the disciplines.

CSR's Hofstetter said she was impressed by what she found as she talked to students, teachers, Comprehensive Employment and Training Act (CETA) personnel in the area, officers of employment security and other business and labor leaders. "TAT offers a unique opportunity to under-trained persons in our labor force. It gives them a chance for a decent-paying, productive occupation," she said.

255th Dividend told

The board of directors of Union Carbide Corporation has declared the company's 255th consecutive dividend. The amount is 80¢ a share on the outstanding capital stock of the corporation, payable March 2, 1981, to stockholders of record on February 6, 1981.

The last quarterly dividend was 80¢, paid on December 1.

Nuclear Division posts best ever safety performance during 1980

The nearly 20,000 employees of the Nuclear Division, who over the years have achieved an outstanding safety record, finished 1980 with one of the best safety performaces in the Division's history.

Commenting on this 1980 safety performance at the four installations, Roger F. Hibbs, Nuclear Division President, stated: "For the second year in a row the almost 20,000 Union Carbide employees at Oak Ridge and Paducah have accomplished an exemplary safety performance. In 1980 seven individuals were hurt on the job seriously enough to lose time from work. These seven accidents included falls, cuts, and bruises that were totally unrelated to the molten metals, the radioactivity, the hazardous chemicals, the moving machinery and the high-temperature processes with which we work daily. Had our safety performance been the same as that for the chemical industry as a whole, more than 16 times as many employees would have lost time from work as a result of serious injuries on the job.

"I know we do most of the right things in identifying hazards, conducting safety investigations, making safety audits and inspections, etc., but the real reason for our excellent performance is the conscientious attention to safety by every one of our people.

"Also, I am pleased that our off-the-job safety last year improved 16 percent, and I would hope we could all continue to work together in making sure we are as safe away from work as we are while at work."

A different drummer . . .

Paducah's Jerry Carter collects cars ... Corvettes, that is

by Darlene M. Mazzone

To say that Jerry Carter, head of the Paducah Plant's Mechanical Engineering Department, is fascinated by automobiles would be sadly understating the case. This fascination has been transferred over the years from a 1947 jeep to the sleek Corvettes he now pampers as collectors' items. In between, Carter has changed cars the way most people change their wardrobe, acquiring more than one hundred over the years.

Following closely behind the wheels of the jeep came the classic 1957 Chevy, while he was in high school. Then there was the '61 Pontiac, '64 Pontiac, three new '66 Chevrolets, a '67 Chevy, a '67 Dodge and a '67 Ford. By now, Carter was at the University of Kentucky studying mechanical engineering (an appropriate choice.) During this period, he built a dune buggy from a '63 Volkswagon, assembling the engine in the living room of his mobile home. He also added a '68 Chevy, a '68 Riviera and a '53 Rambler to his growing collection.

But by 1974, Carter had graduated not only from student to professional but also from conventional car to the sporty Corvette. "The first one was orange and I saw it parked at a pizza parlor. I went in and asked them to page the car's owner. About three days later, I bought it," he explained. He later sold it to a friend and bought a newer model. "Since I seemed to be having trouble keeping a personal car, I started collecting," Carter said.

It began with a '66 Corvette and eventually grew to include, at various times, every model of Corvette made, with the exception of seven individual years. The first Corvette was built in 1953. Only about 300 were made that year, and 171 are known to exist. Carter intends to add one of these to his collection, along with a '57, a '75 convertible and a '57 black Chevy Belair with a white top. His goal is to add a car to his collection every two years until he has 30.

Carter has three Corvettes in his private collection: a 1969 convertible in mint condition; a 1961 fuel-injection convertible; and a 1969, 427 convertible, with the largest Corvette engine ever made. He has very definite ideas about what he wants in a car. "A car should be a four-speed convertible with chrome bumpers. That's what the ideal car should look like," he declared. His favorite Corvette was the 1969 model.

According to Carter, this automotive avocation gives him a great deal of pleasure. "I enjoy taking cars apart and painting them. I don't believe in mowing the grass and painting the house. This is my recreational outlet," he explained.

So, for the past year, Carter has been up to his hubcaps in recreation while totally disassembling a wrecked 1972 Corvette. From these refurbished parts and pieces, plus some new components, Carter intends to build, from the wheels up, a turbo Corvette like John Greenwood's racing model.

This isn't a totally new experience for him. He disassembled his 1969 Corvette, detailed it, replaced some of the parts and reassembled it. He spent six months refurbishing the engine alone.

But all this effort is not without its rewards. Within the past two years, Carter's Corvettes have earned some ten awards in Corvette shows around the southern and northeastern United States. In these competitions, cars are placed in one of two divisions — concourse (cars that are never driven and used only for display) or street car. Entries are also placed in categories according to year.

Judges rate the cars individually on such aspects as paint, originality, mechanical operation, interior, etc. Drivers perform any functions requested by the judges, who never touch the cars. The cars are finally ranked by total numerical score.

"At a good show," Carter said, "there are typically around 60 cars and you can win from $100 to 250. There are usually three or so cars per class and 10 to 20 classes."

He admits that there are certain disadvantages associated with the Corvette cult. "One problem is

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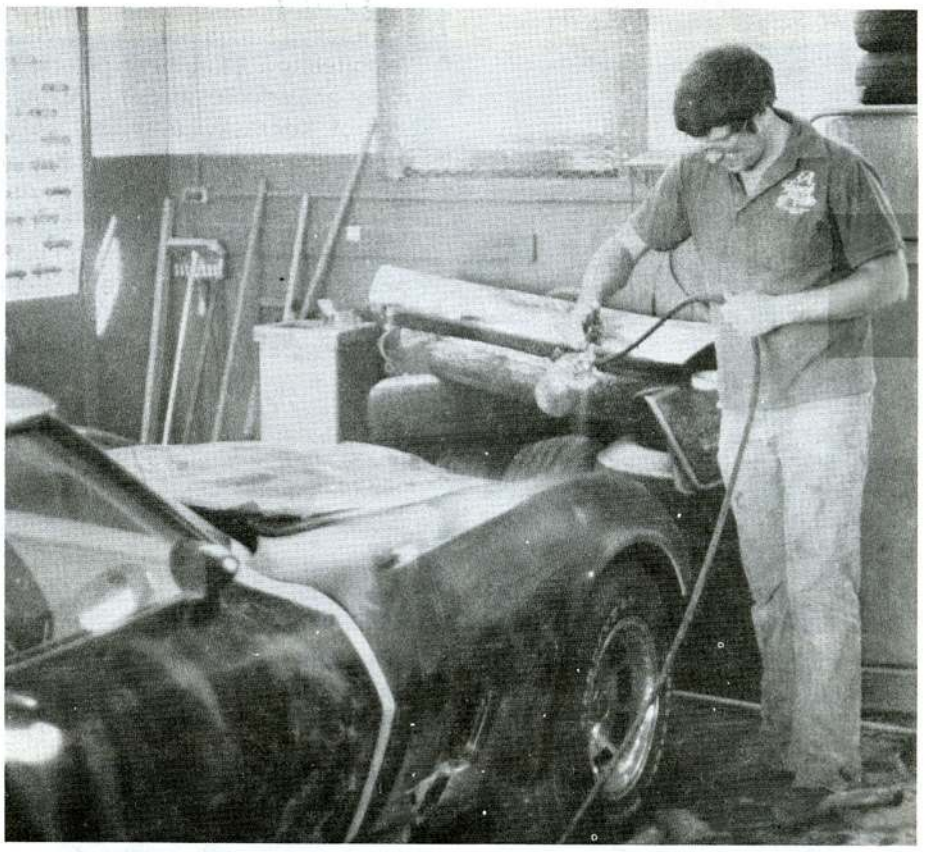


News About People

Sinquefield

James L. Sinquefield has become a registered professional architect in Kentucky. He joined the Civil and Architectural Engineering Department at Paducah in 1978. A University of Kentucky graduate, he was employed by L.P.S. Associates and Gresham, Kerr, Keeling and Associates before joining Union Carbide.

He and his wife, Martha Ellen, have three children, Bryan, Michael and Jennifer.

Williams

Charles S. Williams, manager of computer sciences at ORNL, has been elected to a three-year term as southeast region representative to the national council of the Association for Computing Machinery.

The Association, the world's largest educational and scientific society for computing professionals, has more than 46,000 members.

Williams, who is on the UCC-ND Computer Sciences Division staff, will represent Association members from seven southeastern states, the Caribbean and South America. He joined the organization in 1958 and is a charter member of the Mid-Southeast Chapter, which encompasses middle and eastern Tennessee and northern Alabama.

He holds degrees from Maryville College and Vanderbilt University and has been with Union Carbide since 1952. Williams worked in computer facilities at the Y-12 Plant and ORGDP before coming to ORNL in 1962.

He and his wife, Anne Robison Williams, live at 126 Baltimore Drive, Oak Ridge. They have a son, Scott.

Lyon

William S. Lyon Jr., section head in ORNL's Analytical Chemistry Division, has received the 1980 Radiation Industry Award of the American Nuclear Society. The award, presented November 18 at the International Conference of the American and European Nuclear Societies, recognizes outstanding contributions to industrial applications of radiation technology. It consists of an engraved certificate and a $1,000 honorarium.

Lyon was cited for "pioneering research in developing methods for assay and identification of radionuclides for industrial applications, the extension of nuclear analytical methods to studies of fossil energy production, and his leadership in developing and publicizing industrial use of such methods."

Lyon earned his BS degree in chemistry from the University of Virginia and an MS in management from the University of Tennessee. He came to ORNL in 1946 after working at the Y-12 Plant for two years. He and his wife, Corky, live at 7007 Rockingham Drive, Knoxville.

Safety Scoreboard

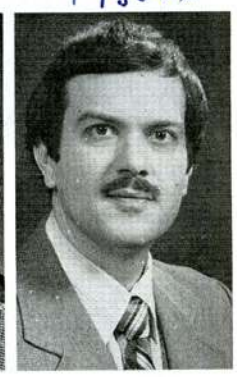
Time worked without a lost-time accident through February 5:

Y-12 Plant	136 Days	4,518,000 Employee-Hours
ORGDP	139 Days	4,096,117 Employee-Hours
ORNL	270 Days	6,300,748 Employee-Hours
Paducah	191 Days	1,072,215 Employee-Hours

PR appointments announced

Two appointments have been made to the staff of the Division's Public Relations Department. Ruby A. Miller, who has served as assistant director in the Public Relations Office at ORNL, has been given responsibilities in the production areas, providing assistance to Vice Presidents Paul R. Vanstrum and George R. Jasny, and members of their staffs. Robert H. Neal, who has 10 years of media experience, will assume responsibilities at ORNL previously handled by Miller.

Miller



Neal

A native of Spartanburg, S. C., Miller was graduated from Livingstone College. She joined the Nuclear Division at ORNL in 1968 and was transferred to the Public Relations Department four years later.

In addition to her normal duties, she has served as a part-time instructor in the College of Communications at the University of Tennessee and has been an advisor to minority public relations students. She is the current president of the Volunteer Chapter of the Public Relations Society of America and is a member of DOE's Personnel Security Board, Personnel Advisory Board for the Oak Ridge Schools, and the ORAU/ORNL Committee on Human Studies.

Miller and her husband, Horace, live at 127 West Lincoln Road, Oak Ridge, with their children Anthony, Darryl and Latasha.

Neal, a native of Winchester, Tenn., was graduated from Tennessee Technological University, where he also took two years of graduate study. He worked for the Cookeville **Herald-Citizen** before serving as an officer with the U.S. Army for two years. After three years with the Franklin, Ind., **Daily Journal**, he joined the **Knoxville News-Sentinel**, where he has been state editor since 1977.

He is married to the former Brenda Ann Matzler, of Townsend. They live in Maryville with their three daughters, Stephanie, Shannon and Stacey.

White named technical assistant

White

James D. White has been appointed technical assistant to Donald B. Trauger, associate director for nuclear and engineering technologies at ORNL.

Since 1978, White has served as manager of the Blowdown Heat Transfer Program, ORNL's largest light water reactor safety project, and as leader of the transient thermal hydraulics group in the heat transfer/fluid dynamics section of the Engineering Technology Division.

In his new assignment, White will assist in the overall administration of research and development carried out in four divisions — Chemical Technology, Engineering Technology, Instrumentation and Controls, and Metals and Ceramics — and in support of five major programs, including nuclear reactor technology, gas-cooled reactor development, nuclear fuel and waste, fuel reprocessing, and work for the Nuclear Regulatory Commission. These activities account for approximately one-third of the Laboratory's more than $300 million annual operating budget.

White succeeds Baden Duggins, who has completed a two-year assignment and is transferring to Engineering Division, where he will be in charge of electrical and instrumentation design for the Fusion Energy Division.

A native of Greeneville, Tenn., White holds BS and MS degrees in nuclear engineering from the University of Tennessee. He joined Union Carbide in 1963 as a co-op student in the Y-12 Plant's Development Division and became a permanent staff member there in 1968.

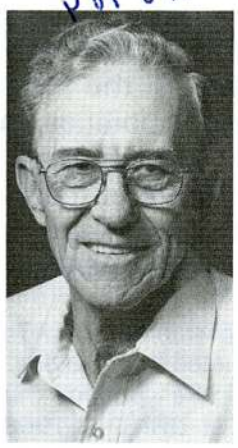
In 1973, he transferred to ORNL's Reactor (now Engineering Technology) Division as a development engineer, where he began his work on experimental determination of rates of heat transfer in water-cooled nuclear reactor cores during accident conditions. His previous experience included development of nondestructive testing methods for special applications involving detection and measurement of various forms of radiation.

White is a member of Tau Beta Pi, engineering honorary society, and the American Nuclear Society.

Recent Retirements

Harold C. Woodall
Enrichment Technology
ORGDP
34 years service

Lonnie C. Nelson
Process Maintenance
Y-12
35 years service



Clifton J. O'Neal
Tool Grinding
Y-12
27 years service

Joe M. Crutcher
Process Maintenance
Paducah
27 years service

Louise T. Burris
Separations Systems
ORGDP
29 years service

James W. Burris
Plant and Equipment
ORNL
30 years service

Kenneth E. Prater
Research Services
Y-12
29 years service

Frank A. Kocur
Solid State
ORNL
34 years service

Charles B. Clifford
Development, PTP Coordination
Paducah
37 years service

Melvin Whited
Maintenance
ORGDP
20 years service

Thelmer C. Stephens
Materials Forming
Y-12
29 years service

James R. Love
Separation Systems
ORGDP
32 years service

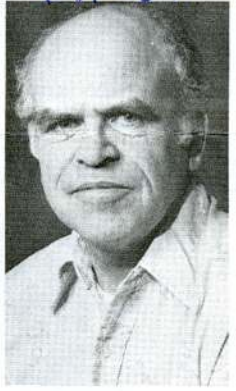
James Macres
Plant and Equipment
ORNL
25 years service

Mary S. Murphy
Technical Services
ORGDP
10 years service

Charles R. McAlister
Purchasing
ORGDP
36 years service

Walker A. Rutherford
Fabrication
Y-12
30 years service

Rufus L. Caldwell
Chemical Technology
ORNL
37 years service

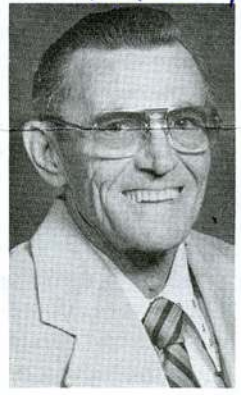


Samuel M. DeCamp
Fusion Energy
ORNL
29 years service

Hallie W. Nidiffer
Information
ORNL
29 years service

John V. Hilyer
Industrial Safety and Applied Health Physics
ORNL
29 years service

Charles E. Davis
Dimensional Inspection
Y-12
29 years service



Max W. Goins
Technical Division
Y-12
38 years service

Robert G. Leslie
Standards and Surveys
Y-12
10 years service

Joe Mitchell
Maintenance
Y-12
28 years service

Delays may occur in pension checks

Corporate Benefit Plans has notified us that delays may occur in making adjustments in the pensions of those who retired after July 1, 1980. These delays are the result of the large number of changes in pensions required by the improvements to the Pension Plan. These changes include improved factors for those taking early retirement, and/or those electing a survivor option, and the level income option. Each adjustment has to be calculated individually and entered into the payment system. Since only a small group of specialists can do this work, clearing the backlog may require several weeks. It is possible therefore, that some of the changes won't be reflected in pension checks until April or May; but when they are made, the changes will be retroactive to their effective date. Everything possible is being done, including overtime and extra days, to correct the situation as soon as possible.

The backlog of work also affects the processing of current retirements. Although every effort will be made to have the initial pension check available at the time of retirement, it is likely that a number of checks will not be on hand for those retiring February 1, March 1 and April 1. When a check is not available on the day of retirement, it will be delivered to the retiree immediately upon arrival. The delay in receipt of a pension check will in no way affect the retiree's insurance coverage or other retirement benefits.

Next issue...

The next issue will be dated February 26. The deadline is February 18.

Jewell G. Hayes
Engineering
Y-12
31 years service

Dillard A. Davis
Materials Shop
Y-12
26 years service

Jack W. Henderson
A Wing Shop
Y-12
21 years service

Harold C. Sanderson
Fusion Energy
ORNL
23 years service

Patents Granted

Richard B. Gammage, ORNL; Danny J. Christian, formerly of ORNL; and John H. Thorngate, Lawrence Livermore Laboratories, for "Method of Improving BeO as a Thermoluminescent Detector."

Paul R. Robinson and Carlos E. Bamberger, for "Thermochemical Cyclic System for Splitting Water and/or Carbon Dioxide by Means of Cerium Compounds and Reactions Useful Therein."

Insurance premiums suspended

Premiums for the Supplemental Life Insurance will be suspended for four months starting March 1.

Those who are participating in the Supplemental Plan on February 28, 1981, including early retirees, will not have a monthly premium payment during the four-month suspension period.

For hourly-paid employees, this means there will be no charge for the coverage during the 17 pay-periods from the payroll week ending March 1 through the payroll week ending June 21. For salaried employees and early retirees, there will be no charge for the months of March, April, May and June.

Save Energy / Share the Ride

ORNL

NEED NEW MEMBER FOR FOUR-PERSON CAR POOL from River Road or downtown areas, Kingston, to East and West Portals, 8-4:30. Steve Lindberg, plant phone 4-7857; home phone 376-3885.

RIDE NEEDED from Oak Ridge Highway between Karns and Solway to East Portal, 8:15-4:45. Peterson, plant phone 4-4483; home phone 690-3989.

JOIN OR FORM CAR POOL from Cedar Lane/Fountain City area to East Portal, 8-4:30. Bobbie Roth, plant phone 4-5433; home phone 688-3926.

JOIN OR FORM CAR POOL from Garden Apartments, Oak Ridge, to West Portal, 8-4:30. F. L. Hannon, plant phone 6-6607; home phone 482-1476.

VAN POOL RIDERS from West Knoxville Bearden and Farragut area to East and West Portals, 8-4:30. Dean Treadway, plant phone 4-6580; home phone 584-4879.

VAN POOL RIDERS NEEDED from Rocky Hill/Westown Mall area, Knoxville, to South and West Portals, 8-4:30. W. L. Pattison, plant phone 4-6888; home phone 691-0781.

ORGDP

RIDERS from Eaton Crossroads area to Portals 5 and 6, straight day. Paul Rutter, plant phone 4-8297.

Y-12 PLANT

RIDE from Country Oaks Apartments, Papermill Road area, Knoxville, to North or Central Portal, 7:30-4 or 8-4:30 shift. Ronnie Thomas, plant phone 4-3751, home phone Knoxville 584-4132.

JOIN CAR POOL from Maryville to Bear Creek Portal, E Shift. L. M. Moore, plant phone 4-2815, home phone Maryville 983-2541.

POSTER WINNERS — Successful participants in the safety poster contest, recently staged in Y-12's Materials and Services Department, get their awards. From left are Al Miller; Safety Director Clarence Johnson; Bobby Watkins, accepting the clock for her granddaughter Gil Valenta's winning entry; and David Geter, Ed Tyle and Don McMurray, all of Stores Department, who designed the handsome clock.

Fuel Recycle Division created; W. D. Burch named director

Burch

The formation of a new Fuel Recycle Division at ORNL and the appointment of William D. Burch as director have been announced. The division will carry out design and prototype hardware activities of the existing Consolidated Fuel Reprocessing Program for which ORNL has been designated as the Technical Management Center by DOE. The program manages all fuel reprocessing development activities for DOE, including those associated with the Liquid Metal Fast Breeder Reactor and High Temperature Gas-Cooled Reactor Programs.

In addition to being director of the new division, Burch will continue his present responsibility as director of the Consolidated Fuel Reprocessing Program Technical Management Center.

Burch joined Union Carbide in 1952 and was appointed director of the LMFBR Fuel Reprocessing Program in 1974. He holds BS and MS degrees in chemical engineering from the University of Missouri at Rolla.

For more than 10 years he was associated with the transuranium element production program, including responsibility for design of the chemical processing equipment in the Transuranium Processing Plant, for which he was in charge of operations for six years.

Before a 15-month assignment during 1973-74 with Union Carbide at Urankum Enrichment Associates, he headed a study which led to improvements in waste management systems at the Laboratory.

Burch and his wife, Betty, live at 958 West Outer Drive, Oak Ridge.

Question Box

When will new program begin?

QUESTION: When will Y-12 start another electrical apprentice program?

ANSWER: There are presently two electrical apprentice classes at Y-12; the anticipated completion dates are June 1981 and May 1982. At the present time there are no plans for another class; however, it continues as a future possibility if work load demands and/or skilled manpower availability so dictate.

Pay for illness?

QUESTION: Why are ORNL hourly employees not paid for absences when ordered home by Company doctors because of illness?

ANSWER: An hourly employee at ORNL who is absent from work due to illness is paid during the absence in accordance with the contract between the Company and the union. The contract does not provide payment for the first three days of a non-occupational disability unless the absence extends for a period greater than three weeks or unless the individual enters the hospital as an inpatient during the first three days of absence. The fact that a Company doctor, rather than an employee's personal physician, determines to send the employee home as too sick to work does not in any way affect the thre e-day waiting period. Absences extending beyond three days are compensated when properly approved.

Carter collects Corvettes

(Continued from page 2)

speeding tickets," Carter commented. "The 427 is almost scary to drive. In any gear, it will start spinning the tires."

"But there are some real advantages, too," he added. "Corvettes usually do not depreciate in value. They can prove to be a very sound investment." Carter has bought and sold collection cars from Idaho to New York and from West Virginia to Florida — and occasionally in some very unorthodox ways.

One Corvette was purchased over a CB radio while traveling an interstate. The trucker was from Nashville, and Carter subsequently followed the owner home and bought his car. On another occasion during interstate travel, he motioned a Corvette driver over to the roadside and promptly purchased his car on the spot.

Although Carter's attitudes about Corvettes and his willingness to share this knowledge are not indicative of sportscar snobbery, he does admit to one elitist idea. When asked about the gas mileage of an expensive car like a collector Corvette, he replied, "If you need to ask about a Corvette's gas mileage, you don't need to buy one."

Volleyball Leagues...

Early February finds the Volleyball Leagues still in competition right down the line.

The three leagues' standings are:

CARBON LEAGUE - NORTH DIVISION

Team	Won	Lost
Net Profits	40	2
Environmental Disasters	36	6
Lucky Spikes	36	9
Prime Time Players	30	9
Condensed Matter	24	15
The Zoo Crew	23	19
Wild Turkeys	24	20
The Spikers	22	20
Carriers	20	16
High Ballers	14	25
Net Heads	14	28
"Tapeworms"	10	29
Zodiacs	12	33
Bio Rejects	9	30
Sluggers	10	32
Thumpers	7	35

CARBON LEAGUE - SOUTH DIVISION

Team	Won	Lost
P.O.I.	35	4
Killer Bees	30	9
Foul Plays	29	10
Buccaneers	29	10
Manipulators	25	14
Cornered Rats	26	16
W.G.A.S.	22	14
The Gamblers	20	19
Bombers	19	23
Odds & Ends	18	24
The Horibas	16	23
Mustangs	15	24
Short Circuits	13	26
Abends	6	33

Leaping Lizards have dropped from the league.

NUCLEAR LEAGUE

Team	Won	Lost
Hawks	34	2
Con-Fusion	33	3
Dipsticks	28	10
Artie's Army	24	12
Dirty Half Dozen	20	10
Maxwell Demons	16	17
Gluons	12	21
Panthers	12	21
The Lobbers	13	26
Absolute Zeros	11	22
Volleyers	4	29

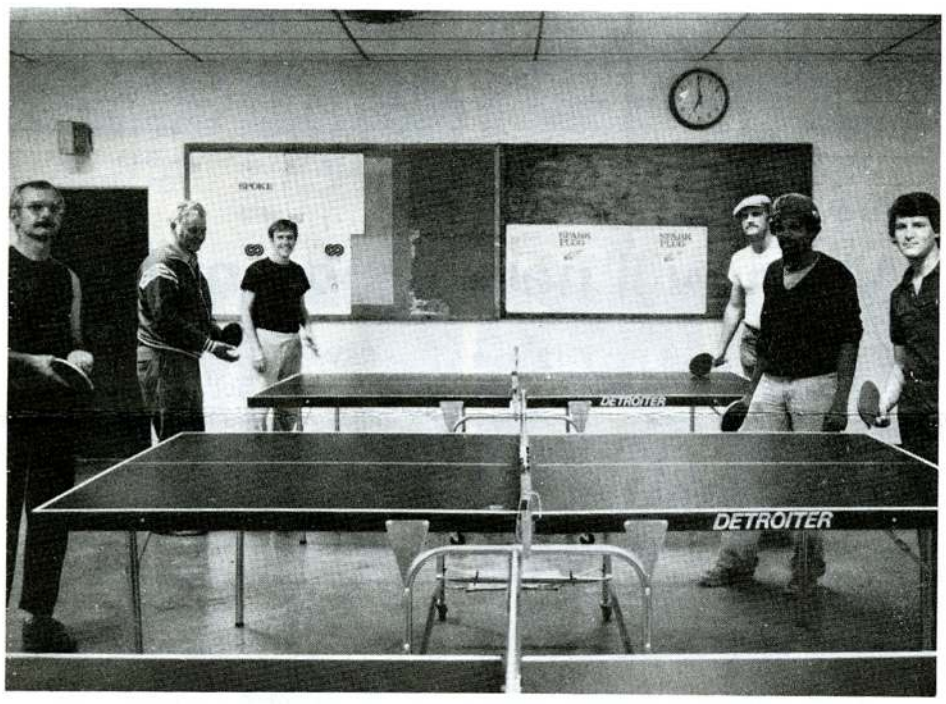


TABLE TENNIS — Ping pong, or table tennis, as addicts prefer, is set every Tuesday from 6 to 10 p.m. and every Sunday from 2 to 6 p.m. at the Jaycees Building in Oak Ridge. Employees and their families are invited to participate in the competition.

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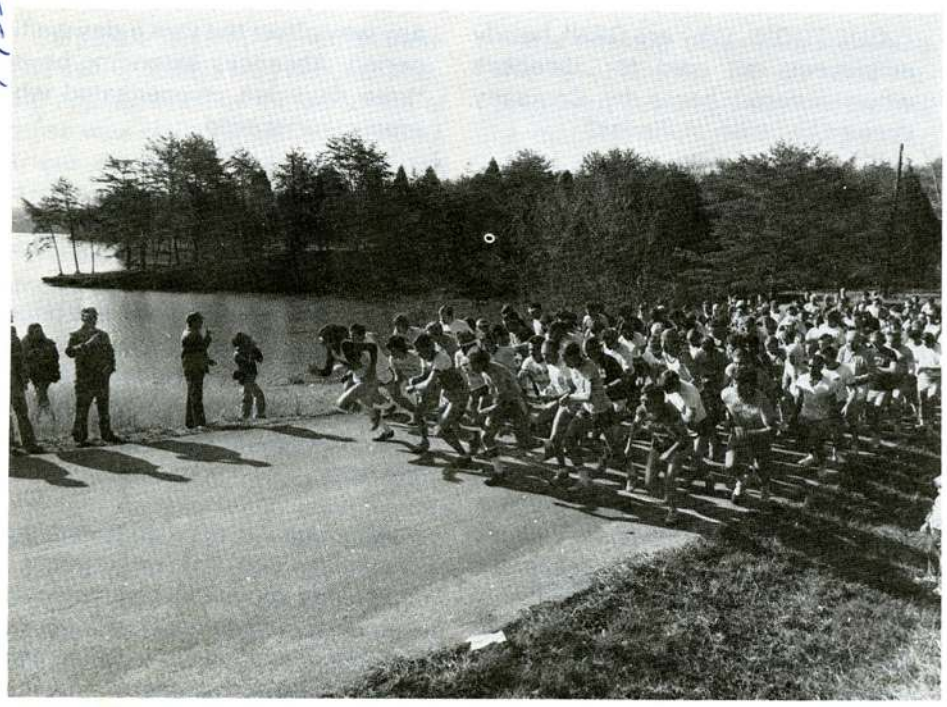

START TRAINING — Road runners interested in participating in another marathon for Carbide men and women should begin training now. The annual event is set for April 11 at the Clark Center Recreation Park. Details will follow.

GOLF LEAGUE WINNERS—The Long Knockers emerged victorious when the points were totaled at the end of the 1980 Men's Golf League at Paducah. They played on Tuesdays from May to September. Members of the winning team are, beginning second from left, Ricky Goode, George Parker, Allan Tucker and Captain Gene White at the wheel. Mike Mazzone, left, captain of the losing team, sat in for absent Long Knocker members, Gus Kosinski, J. W. Harbison and Max Sacharnoski.

Around the alleys...

ORNL C League...

The Timberwolves have a fair lead in the ORNL C League, ahead of the Easy Rollers and Hit Men. The Hit Men took week's highs recently posting a 3005 handicap team series. Their Hatmaker rolled the high game of the night, posting a 246.

ORNL A League...

The Woodchoppers edge out a scant lead in the ORNL A League, only a half point ahead of the Hal Frames, as the ORAU team moves close in third place. Norms Raiders put a high 3210 series down recently, as their aceman McCulley posted a 698 series.

Carbide Mixed...

The Hits and Misses have a one-game lead over the Oops team as the Yankees cling to third place. Willard Hubbard has a 685 handicap series, and Ruth Hardin holds onto a 683. Don Carpenter rolled a 594 scratch series recently; Edith Duckworth a 568 one.

K-25 Tuesday...

The Mishaps are about 15 points ahead of the Atoms as the K-25 Tuesday League rolls seriously. Weekly highs went to M. N. Strickland, 589 scratch series; R. W. Gaylor a 704 handicap total. Individual highs went to L. M. Wilson, 241 scratch, 288 handicap.

K-25 Wednesday...

The Longshots hold a two-point lead over the Amps in the K-25 Wednesday Night League. The Destroyers, however, posted a 3120 handicap series recently to take weekly highs. Chuck McCluskey rolled a 277 handicap single; a 688 handicap series.

UCC Mixed League...

The Safeguards and Rolling Stoned stand in a deadheat tie for the lead in the UCC Mixed League, as the Lickity Splits and Go Getters breathe down their necks. The Squeakers' 899 still stands as high single handicap total.

Y-12 Classic...

The Ridgers have a one point lead in the Y-12 Classic, as the Pendulum, Smelters and Atta-Boys all have a secure hold in second place. The Pendulum rolled a 3177 handicap series recently. Ken Brown, Pendulum, rolled a 722 handicap series.

Y-12 C League...

A three-way tie in the Y-12 C League has the Sunflowers, Anodes and Favorite Five only one point ahead of the Big Five. Bill Johnson's 721 is high handicap series thus far; and Bob Tinkle's 283 handicap game is high single.

ORGDP Women's...

The Guttermaids still hang on to their lead in the ORGDP Women's League. The Spotters, however, were bowlers of the week recently, rolling 792, 765, 788 ... for a total of 2345. Kem Miller's 202+225+275 for a total of 702 was high individual bowler of the night.

UCC Monday Night...

The UCC Monday Night Mixed League saw the Roadrunners win first place in the season's first half. The Lucky Strikes came in second, and the Free Spirit team placed third.

The 'Runners are two games ahead of the Lucky Strikes and Free Spirits as the second half gets under way.

Anniversaries

ORGDP

35 YEARS

Gerald W. Lay, Engineering; Leon A. Owens, Operations; Luther M. Poe, Joe H. Fletcher, Albert J. Edmonds, Francis E. Bowers, Charles A. Bradley, James F. Mooney, all in the Maintenance Division; James H. Henderson, Perry Anthony and Willis M. Isham, Barrier Manufacturing; Forrest E. Johnson, Technical Services; and Ernest C. Evans, Separation Systems.

30 YEARS

Ralph C. Kinnamon, Troy C. Trotter, Erma F. Martin Jr., Harry J. Brown and Russell A. Cooper, all in Engineering; Marjorie H. Gardner, General Accounting; Paul E. Scott, Computer Sciences; Sheldon C. Jacobs, Operations Analysis and Planning; Michael E. Adams and Ben B. Smith, Separation Systems; and Edwin R. Henderson, Technical Services.

25 YEARS

William A. Brickley, Hilton H. Abernathy and Harold C. Jones.

20 YEARS

David H. Creigh.

Y-12 PLANT

35 YEARS

William T. McBryde and Walter W. Rice, Plant Laboratory.

30 YEARS

Homer R. Ellis, Dimensional Inspection; Dolphus L. Holbert, 9215 Rolling Mill; John G. Scogin, Process Maintenance; Judge D. Kile, Alpha 5 North Shop; Mary B. Phillips and James G. McArthur, Materials and Services; Will B. Davis, Guard Department; Harry Baker, Process Maintenance; James D. Burns, Special Services; Freddie Hoskey, Building Services; Johnnie C. Jordan Jr., Standards and Surveys; and William Warmley Jr., Building Services.

25 YEARS

Miles W. Bailey, Carl Leach, Noble G. Young Jr. and James A. Young.

20 YEARS

Raycee A. Vandermeer and Doris S. Sartelle.

ORNL

35 YEARS

Clarence R. Johnson, Plant and Equipment; Fernde Irwin, Physics; James A. Blair, Plant and Equipment; and James H. Oliver, Chemistry.

30 YEARS

Karl W. West, Instrumentation and Controls; Ralph H. Rose, Plant and Equipment; Betty F. Burns, Central Management; William R. Laing, Analytical Chemistry; William R. Miller, Instrumentation and Controls; Delmar D. Montgomery, Plant and Equipment; Mark T. Robinson, Solid State; Edgar W. Brown, Chemical Technology; and Lou F. Parsley, Engineering Technology.

25 YEARS

Georgia C. Bower, Billy J. Howell, Paul J. Jones, Harry R. Child and James W. Hendricks.

20 YEARS

Linsey Dowdell.

Nuclear Division News

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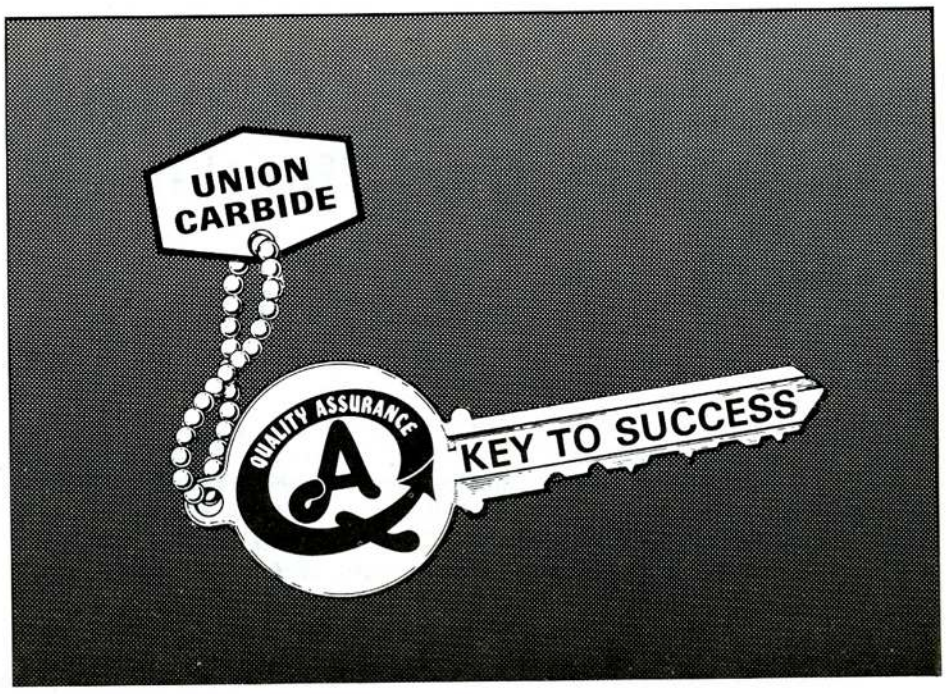
INTERNATIONAL ASSOCIATION OF BUSINESS COMMUNICATORS

Thorne promoted to ORGDP captain

Thorne

Carroll R. Thorne was recently named a fire and guard captain in ORGDP's Plant Protection Division. A native of Crossville, he joined Union Carbide in 1979 after serving in the U.S. Marine Corps. He attended Columbia State Community College and has a BS in criminal justice administration from Middle Tennessee State University.

Thorne is a captain in the U.S. Marine Reserve and lives at 109 Redbud Drive, Clinton.



Questions and answers about quality assurance

(EDITOR'S NOTE: The week of March 22 has been designated "Quality Assurance Week" throughout the Nuclear Division. The observance of this special week has a twofold purpose: 1) to emphasize the importance of quality, quality attitudes and acceptance of individual responsibility for achieving quality work; and 2) to recognize the role of quality assurance in achieving quality objectives. As part of this observance, the following questions about Quality Assurance are answered.)

QUESTION: What exactly is quality assurance?

ANSWER: Quality assurance is the planned action necessary to provide adequate confidence that a material, component, system or facility will perform satisfactorily in service.

QUESTION: Why do we need a quality assurance program?

ANSWER: Quality failures occur everywhere — R&D, engineering, procurement, construction, production, maintenance and distribution. Management has concluded that a good QA program will reduce the impact of quality-related problems more than enough to offset QA program costs. It is often possible to overcome the quality-related problems and their adverse impacts on costs, schedules, environment or safety, but it is better if the problems can be prevented. This is especially true in the high-technology programs found in the Nuclear Division.

QUESTION: Our QA program stresses the importance of using quality materials. Purchasing has to buy from the lowest bidder. Shouldn't we buy from vendors who supply top quality?

ANSWER: Our definition of quality is "fitness for intended use," and it is indeed important to avoid purchasing material that does not meet our quality requirements. However, it is obviously good business to meet those requirements at minimum cost. All departments involved are jointly responsible for defining our needs and ensuring that vendor-supplied items measure up. Quality assurance procedures are utilized to identify and prevent potential problems.

QUESTION: I have been told that the QA program saves money. When I look at the amount of paperwork and the number of people involved, I wonder if this is possible. What do the accountants say?

ANSWER: Like the safety program and our environmental control efforts, QA is primarily aimed at preventing negative results. To measure the program's success in dollars requires estimating the cost of quality-related problems that did not occur, which is difficult, at best. Quality failure costs that do occur are monitored, and they have dropped significantly in some operations following implementation of QA procedures. We have programs with the potential for significant quality failures. If QA activities prevent just one such failure, the costs avoided will more than pay for the QA program. Nuclear Division QA policy does emphasize the importance of restricting QA activities to the applications where they would be cost effective.

QUESTION: I've heard that QA is important. I'm interested in doing my job well. How do I find out what I'm supposed to do for QA?

ANSWER: You can learn about the QA activities in your organization from your supervisor or your QA coordinator. But everyone can help meet quality objectives by assigning quality a high priority. If the results of your efforts do not meet quality requirements (that is, they are not fit for intended use), you probably need to change the way you're doing things. Poor quality causes higher costs and missed schedules. It's always better to "do it right the first time." In addition, everyone can help by identifying and reporting potential quality failures.

The Cold "Battlefield"

by T. A. Lincoln, M.D.

(Editor's Note: Dr. Lincoln alternates his regular column with "The Medicine Chest," where he answers questions from employees concerning health in general. Questions are handled in strict confidence, as they are handled in our Question Box. Just address your question to "Medicine Chest," **NUCLEAR DIVISION NEWS,** *Building 9704-2, Stop 21, Y-12, or call the news editor in your plant, and give him or her your question on the telephone.)*

A spectacular battle occurs while a person suffers from a cold. It is waged on a swollen, reddened and water-logged battlefield in the nose, sinuses and throat. Although the invading viruses may gain an initial advantage, bodily defenses usually win out in only a few days.

Once the virus enters a cell on the surface of the respiratory tract, it "takes over" by overwhelming the cell's own control center and instructing cellular ribosomes [granules of ribonucleic acid (RNA)] to make viral proteins rather than cellular proteins. New viral RNA units are struck from the template of the invading viral RNA, and are soon "fleshed out" with stolen protein. They migrate to the wall of the cell, where they are pushed outside to invade another cell.

About this time, alarm bells begin ringing and reinforcements for the cells begin to appear. Interferon production is the first reaction. These small, protein macromolecules diffuse into the environment of neighboring cells, where they switch on the manufacture of proteins which strengthen the defenses of unviolated cells.

In many cases, the invading virus doesn't get complete control of the cell's nucleic acid mechanism, so the new offspring viruses are defective. These incomplete new viruses go out and create confusion. They are more vulnerable to bodily defenses and get in the way of the complete virus particles.

Soon the body begins to mobilize its heavier weapons, including white blood cells, immune complexes, antibody and macrophages. The latter are cells that can ingest weakened viruses and bacteria and generally function as scavengers.

The "battle" is violent, because the changes in the cell wall that occur during the viral invasion cause it to be looked upon as almost a foreign protein. An allergy-like reaction follows. The cells swell, there is an outpouring of fluid, and irritation causes frequent sneezing.

'About this time, reinforcements for the cells begin to appear.'

Many of the most distressing symptoms are only evidence that the mucous membrane in the nose and throat is fighting a successful battle. The virus infection stimulates an immune response, which eventually helps destroy virus particles.

White blood cells produce enzymes that are destructive to some of the surface cells as well as the viruses. Many cells are destroyed or damaged in the battle. They are replaced after the infection subsides.

Naturally, one would like to give support to the defending "soldiers" in the attack; unfortunately, no specific antiviral weapon is available. Unless there is fever, complete rest in bed doesn't shorten the healing process. Reasonable rest at night, adequate fluids and symptomatic relief with mild decongestants and aspirin are usually sufficient.

'White blood cells produce enzymes that are destructive to some of the surface cells as well as the viruses.'

Antibiotics are justified only when a secondary infection occurs. High doses of Vitamin C do not prevent colds but may reduce their severity when they occur.

Colds are not particularly contagious. The actual process of shedding the virus may last for over a week, so staying home for a few days to protect fellow workers doesn't really make sense. The old axiom, "a cold lasts seven days when treated and one week when it is not," still applies. Mother Nature is usually kind if you only give her a chance!

Energy-saving tips

The following energy-saving tips, provided by DOE, are recommended for all homes, no matter what type of heating system is used.

Insulate your attic and exterior walls to levels recommended for your area.

Caulk and weatherstrip cracks around doors and windows.

Install storm windows or cover windows with a sheet of clear plastic.

Close off unoccupied rooms.

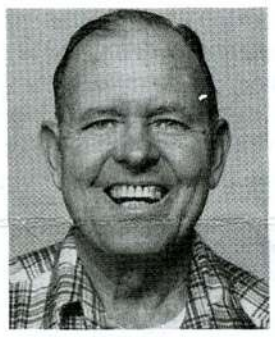
Use kitchen, bath and other ventilating fans *sparingly.*

Reduce the temperature setting on your hot water heater to the lowest effective temperature.

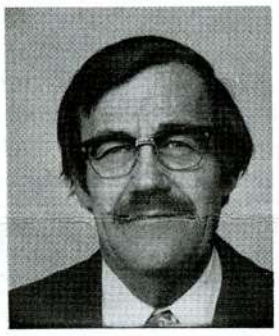
Patent granted

Anthony C. Schaffhauser, Henry Inouye, and Chain-Tsuan Liu, all of ORNL, for "Fe-Based Long Range Ordered Alloys".

Nuclear Division Deaths



Mr. Golson



Mr. Mark

Mr. Stogsdill

Melvin H. Golson, an inspector in Technical Services at ORGDP, died February 3 at a Knoxville hospital.

A native of Texas, he joined Union Carbide in 1967. He was a veteran of World War II.

Survivors include his wife, Margaret Golson, Route 2 Mealer Road, Lenoir City; daughters, Melba Wyatt, Ann Golson, Mary Trentham; son, Leonard R. Golson, seven grandchildren; and brothers Home and John Golson.

Funeral services were held at the Calvary Baptist Church, with burial in the Abbott Cemetery.

In lieu of flowers, contributions may be made to the Calvary Baptist Church building fund or to the Heart Fund.

Richard L. Mark, an engineer in the Technical Services Division at ORGDP, died January 29 at a Knoxville hospital. He joined Union Carbide last year.

Mr. Mark was a veteran of the U. S. Army.

Survivors include his wife, Janis Warren Mark, Kingston; daughters, Linda and Lisa; mother, Emma Mark; and a sister, Lavonne Grulke.

Memorial services were held at Kingston United Methodist Church. The family has asked that any memorials be as gifts to the East Tennessee Chapter of the American Heart Association, 1206 Pierce Parkways, Knoxville 37921; or to East Tennessee Baptist Hospital Foundation, Blount Avenue, Knoxville 37920.

Cecil M. Stogsdill, Y-12 Product Engineering and Scheduling, died at his Oak Ridge home February 1.

He served in the U. S. Navy and joined Union Carbide in 1960.

Survivors include his wife, Juandell Tarrant Stogsdill, 109 Ogontz Lane; sons, Cecil, Richard, Jack and Mark; a daughter, Margo Fairbanks; a step-daughter, Phyllis Delay; a brother, Russell; two sisters, Pauline Wampler and Thelma Branum; and 15 grandchildren.

Services were held in the chapel of Weatherford Mortuary and burial in the Anderson Memorial Gardens.

The family wishes memorials to be in the form of gifts to the Elks National Foundation of Nurses Scholarship, c/o the Elks Lodge, 684 Emory Valley Road, Oak Ridge.

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